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ABSTRACT

The report presents a general plan for improving the education of gifted and talented students (preschool-secondary grades) in Quebec. Short term (2-4 years) and medium term (3-6 or 7 years) actions are recommended. An introductory section defines giftedness and emphasizes the need for special educational provisions for this group. The second part addresses curriculum organization according to the following major topics (sample subtopics in parentheses): preschool, elementary programs (career awareness, students' interests); secondary programs (continuity of programming); the arts; special schools; role of private schools; special populations among the gifted (girls and women, handicapped students); services among schools (cooperation in staffing); teaching materials; and organizational principles. In subsequent parts, institutional responsibilities are considered, including teacher and administrator training and inservice. Among special considerations in program implementation are costs, program evaluation, and sensitization. (CL)

Report to the

Ministère de l'Education du Québec

Direction des politiques et plans

Service des plans de développement

on

# The Education of Gifted and Talented Children in Quebec in the Short and Medium Term

Prepared by

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## Preface

The writer was asked to offer advice on short and medium term plans for the education of the gifted from preschool through secondary education in Quebec. This report is therefore written in the form of a general plan for action. It takes into account the existing education statutes and regulations, allows for possible adjustments in the organization of educational structures, and takes advantage of opportunities offered in current practices and plans including the Régime pédagogique. On the other hand, the report also indicates where services and programs for the gifted would benefit from flexibility or even changes in the system. The report interprets its mandate as applying not only to school services and programs, but to the educational support and community networks which can benefit the education of the gifted.

"Short term" is interpreted to represent a period of two to four years from the beginning of implementation. "Medium term" is understood to be three to six or seven years. In functional terms, the short term corresponds to a period of initiation of a Quebec-wide system of services and programs for the gifted, and the medium term refers to a period of considerable maturation, elaboration, and development of such services and programs.

## Biographical Information on the Writer

The author is Associate Professor of Education at McGill University, Montreal. His responsibilities include a joint appointment in the university's pedagogical service and higher education centre, the Centre for Teaching and Learning Services, and in the Department of Educational Psychology and Counselling of the Faculty of Education. His primary responsibilities include research and graduate supervision in the areas of high level learning and teaching, encompassing both higher education and giftedness.

In the field of giftedness, the author notes the following among his credentials in recent years:

- creation of the first and only program in professional education for teachers of the gifted in Quebec and Canada, the Diploma in the Psychology and Education of the Gifted at McGill University,
- establishment of the McGill Giftedness Project, the first major graduate research and training project in giftedness in Quebec and Canada,
- membership on the editorial boards of **Gifted International** and **Gifted Educational International,** and a regular contributor on the topic of giftedness to these and other publications,
- elected as the first president of the Association for the Gifted in Canada (1978),
- Chairman of the Knowledge Production and Utilization Committee of the Association for the Gifted (International),
- Secretary of the World Council for Gifted and Talented Children, and
- Organizer and Program Chairman of the Fourth World Conference on Gifted and Talented Children in Montreal, 1981.

In addition, the author is a frequent consultant and speaker on the

gifted across Quebec and elsewhere, and has played an active role in the development of school programs and university research in giftedness since the mid 1970's.

## Part I Definitions and Principal Concepts

### 1. Giftedness (la douance) and the Gifted (les doués)

There are many definitions of "gifted" and it is extremely important to select a working definition that facilitates the offering of services and programs and is readily defended. Particular merit is contained the following three definitions.

> Witty (1958, p. 62): "we consider any child gifted whose performance, in a potentially valuable line of human activity, is consistently remarkable."

> The U.S. Congress Gifted and Talented Children Act (1978, p. 1).: "gifted and talented children means children and, whenever applicable, youth, who are identified at the preschool, elementary, or secondary level as possessing demonstrated or potential abilities that give evidence of high performance capabilities in areas such as intellectual, creative, specific academic, or leadership ability, or in the performing or in visual arts, and who by reason thereof, require services or activities not ordinarily provided by the school."

> Renzulli, Reis, and Smith (1981, p. 27): "Giftedness consists of an interaction among three basic clusters of human traits--these clusters being above average

> general abilities, high levels of task commitment and high levels of creativity. Gifted and talented children are those possessing or capable of developing this composite set of traits and applying them to any potentially valuable area of human performance. Children who manifest, or who are capable of developing, an interaction among the three clusters require a wide variety of educational opportunities and services that are not ordinarily provided through regular instructional programs."

The important feature of these definitions is that they reach out to find children who may need special attention without being too narrow with regard to the strengths that will be responded to. Furthermore, the emphasis is on making available programs worthy of such students, not labeling children.

It is possible to subdivide the definition into gifted (doué), very gifted (pludoué), and profoundly gifted (surdoué), and similarly with the word talented (talentueuse). This report does not address that issue at length, since it takes an alternative view, namely, that it is not focussed on a particular number of children that might be served (the main result of such definitional splitting is obtaining estimates of the potential population size). Rather, this report advocates that, according to resources available, a number of places or slots be served. For example, a hundred places can be filled by any number of children in a mixture of full- and part-time services if a flexible and adaptable management system is in place. However, these are matters to be discussed below. The important point here is that an

adaptable definition is preferred because it fits the type of programs to be advocated.

In general, the term "gifted" is like "learning disabled." It is a general phrase which should alert us to a child with special needs. It tells us little, however, about what to do unless we ask some more probing questions, such as the following. What kind of gifted performance does the child exhibit? Under what circumstances? At what times? Are there any complicating or concurrent conditions? The proposals of this report will include vehicles for such elaboration.

## 2. Programs for the Gifted are Necessary

While some defense will be offered below, this report is based on the presumption that gifted children require special attention in school. Not only does the regular curriculum hardly challenge them, but also boredom, underdeveloped study and work skills, high reward for effortless performance, lack of contact with intellectual press, and failure to realize potential for growth create serious personal, institutional and societal risks.

## 3. Programs for the Gifted Serve the Cause of Excellence in Education for All Children

In addition to avoiding potential and real problems from the neglect of the needs of the gifted, there is also an extremely important and entirely positive goal. Programs for the gifted focus our attention on excellence. They help us define in practice high levels of expectations which benefit all parts of the educational process. U.S. publishers recently acknowledged a

drop over a decade of some two grades a decade in the level of their textbooks. This watering down of curriculum cannot be counteracted in any more effective way than by example in the materials necessary in programs for the gifted. As well, performance of pupils and teachers is measured in relation to the best possible, not what might be a minimum acceptable standard.

### 4. Good Prescriptions Already Exist

There is a flowering activity in North America and around the world in progams for the gifted. Every state in the U.S.A. has some structure, many have mandatory services. In 1981 Ontario passed Bill 82 with parallel provision for the gifted and learning disabled. Israel, Bulgaria and Venezuela among others have well articulated national programs of education of the gifted or the development of human abilities. There are many well tried management and curricular models from which to choose and to adapt. It is not necessary to "reinvent the wheel" while designing programs which respect the unique linguistic, geographical, cultural, political, and other characteristics of Quebec. A major part of each of these characteristics is diversity which leads to certain organizational needs to be discussed in Part III.

### 5. Harmony with the Laws, Regulations, and Régime pédagogique of Education in Quebec

For any program or network of programs to be successful, there must be overall harmony with the present and propopsed organization of the

education system. Following are the major points of concordance; in later sections some specific suggestions will be made regarding barriers which remain in the way of providing fully adequate programs.

It is important to point out that the Quebec education statutes and other documents make no mention of the gifted. In fact, they should make equal and corresponding mention of the gifted as of the learning disabled. However, even pending such action, here are some existing principles on which programs for the gifted could be based:

- "Every child is entitled to the advantage of a system of education conducive to the full development of his personality." (Preamble to R. S. 1964, c. 234, Superior Council of Education Act).
- "Promotion to secondary school after only five years of elementary school may be effected only in exceptional cases, on condition that the pupil has completed the requirements of the enriched curriculum established by the school board, and has attained the social and affective maturity needed for advancement to secondary school." (Régime pédagogique, Division III, Subdivision 2, Section 40).
- "In addition to the prescribed secondary curricula, the school board may design curricula to meet its own particular needs, provided they are approved . . . . " (Régime pédagogique, Division II, Section 3).
- "The school board in charge of education services at the elementary level is responsible for determining whether the pupil has met the elementary level requirements. . . .

  "Academic achievement should not be the only criterion for promotion from elementary to secondary school. It is important also to consider the development of the pupil, personality and his affective and social maturity. For this reason, promotion after

only five years remains exceptional. The elementary school is, in such cases, asked to have the pupil benefit from enrichment activities.

"The secondary school should therefore have developed provisions for receiving such pupils which are adapted to the diversity of their needs." (Régime pédagogique, Division III, Section 21).

While other paragraphs may also be cited, these are sufficient to:

(a) recognize the obligation of our schools to serve the full potential of every child,

(b) require serving the full development of the child, not only the academic,

(c) offer locally developed enriched elementary curriculum which may or may not, according to the situation, be coupled with acceleration,

(d) permit some acceleration where appropriate,

(e) enable the restructuring of the prescribed timetable as long as the overall core goals are achieved by the children affected,

(f) permit school boards to seek approval of recognized programs for gifted children whose particular needs are recognized,

(g) note the responsibility of secondary schools to develop provisions for serving gifted students such as may have benefitted from an enriched curriculum and possibly some acceleration.

These are most adequate bases for the short term planning of programs for the gifted and the proposals which follow take them fully into account.

Another theme which recurs in the documents is the emphasis on integrating children with special needs into the regular class as much as possible. It is important to point out, however, that the special needs of gifted children are, for the most part, not presently served and cannot all be served in the regular classroom. The need is for greater differentiation.

The general rule can be respected, but the net effect over the short term will be for most gifted chidlren to spend more time out of the regular classroom. The kinds of things the regular classroom cannot adequately accomplish will be described in the course of Part II of this report.

## Part II Organization of the Curriculum

## Division A Preschool Gifted Children

### 1. Young Gifted Children at Home

The education of all children begins at home at the latest at birth. Every educator recognizes the tremendous variance in social competence, language, numerical skills, conceptual development, etc., that are revealed by children when they first enter school. Every educator of the young further recognizes those children whose home environments have encouraged verbal development, inquisitiveness, confidence, joy in successs, creativity, intellectual risk-taking, a sense of humor, love of books, task persistence, and the ability to relate to adults and older children. These are some of the characteristics found among gifted preschool children which are clearly influenced by the milieu in which they are raised.

The purpose of this brief section is therefore to appeal to collaboration with the Ministère des affaires sociales to participate in communicating the the things parents of very young children can do to facilitate their children's intellectual and creative growth. The work of Burton White stands out in this regard. Available delivery systems include public health nurses, pediatricians' offices, enclosures with family allowance cheques, and annoucements and programs on radio and television.

If the potential for giftedness is not encouraged at this stage, it is a reasonable guess that it is easily lost. The steps that can be taken would be of benefit to all children and should be presented in this manner.

Further suggestions are contained in the later section on parents in general.

## 2. Young Gifted Children in Day Care (Garderie)

Some children begin attending day care as young as two months old. Points of influence include the training of child care teachers in whose programs there is presently no required study of differentiated abilities in young children, nor in the suitable adaptations to ensure that a preponderance of undifferentiated group activities does not hold back some children, that the environment is stimulating, that rich and correct language is used at all times, that music, stories, and activities reach beyond the mundane, and that the children are encouraged to participate in planning and evaluating their learning as they grow and become capable of doing so. At this level it is possible to begin some of the general enrichment ativities noted later for elementary schools. It is also possible to sustain an active program of support and education for parents.

## 3. Prekindergarten (Prématernelle) and Kindergarten (Maternelle)

These classes mark the beginning of formal education under the auspices of the Ministère de l'Education for most Quebec children. There is a long tradition of open pedagogy and child centered activity at these levels, nevertheless, there is considerable opportunity for adaptation to the needs of the gifted even within such an environment. For example, many children enter kindergarten capable of reading and writing, or nearly so, counting and computing, competent in music, dance, sport, art, and languages. Other have the potential for rapid advancement in these areas or excel in their social

competencies or logical thinking. It is therefore suggested that these levels be served by the same program involving the rest of the elmentary school. This model is described in section B1.

### 4. School Entry Age

The question of school entry age has indirectly been the subject of recent discussions in Quebec. However, the present concern is not for which arbitrary minimum date is set. The present recommendation applies equally to October 1st or any other date.

There are some young children who are physically and socially mature, verbally and numerically competent, and often capable of reading. In many cases they are ready for school early. It might be appropriate to permit a small number of such admissions per school on an experimental basis. Experience elsewhere has been long established as positive with such policies.

## Division B Elementary School Programs for the Gifted

### 1. Proposed model of the Organization of Curriculum

The proposed model is the **Enrichment Triad and Revolving Door** developed and extensively field tested by Renzulli and his colleagues at the University of Connecticut. The model is entirely compatible with models which address the level and nature of teaching materials, a topic discussed separately later. The Triad and Revolving Door deal with management, curriculum design, and identification. The principal curricular features are as follows.

The curriculum for the gifted is organized around three types of activities. Type 1 is exploratory enrichment activities. Enrichment is defined simply as anything that is not compulsory. Possibilities range from activity centers to visits, special lectures and films, and short courses. While the level should be "high" wherever possible (see the section on materials), many of these activities can be available to all children of a class, grade, or whatever. Type I activities serve several purposes. They assist in the identification process by allowing children to express their interests and demonstrate competence in possibly unsuspected areas. They permit a wide involvement of teachers, parents, volunteers, and children as peer teachers. The duration of specific activities is usually short, from as little as a few hours to a few weeks, so that many children can be involved. They can also be provided within the regular classroom though some demand at least activity centres to be carried out.

Type II activities are done in groups and normally require that the children who are involved convene for these opportunities. These activities

consist of specific training in skills which the children require in order to do some Type III activities, for example, creative problem solving, calligraphy, laboratory techniques, typing, computer skills, plastic arts, reading music, perating video equipment, thinking skills, or debating. These help overcome the problem of gifted children becoming very frustrated because they do not have the skills to do something that interests them. Some of these mini-courses, as they might be characterized, may be open to any interested student, though the quality of production might vary widely.

Type III activities are the core of a program for the gifted. These are high level, individual or small group problems, defined by the child's interests, directed toward real issues, resulting in a product with an intended audience, and carried out on a contract basis. A few examoles include children producing publications, planning the improvement of a local park, and presenting the report to a town planning department, conducting or participating in an electoral campaign, learning about any academic topic that catches their interest, or writing a classroom management computer program. A four-year-old may establish a hydroponic garden, and cook with the produce, an older child may compose a sonata for a recorder for a school concert, learn about topology, or learn some Chinese. The potential list is endless. These draw on above average ability, creativity and commitment. Some of these activities can be carried out in the regular classroom, but it is evident that most require access to materials and expertise that go beyond what most classrooms and teachers can offer under

the best of cirucumstances.

## 2. Assignment of Responsibility within the School

It is therefore necessary for each school to have someone in charge of the gifted program who can master and coordinate these resources, both material and human. A roster of parents and other local people with special skills is an important component of this.

## 3. Identification and Selection of Children

The Revolving Door Identification Model describes how children are brought into contact with these various activities. Identification is a multilevel and polyvalent process. At the first level, anywhere from 15% to 25% of the school population, on a school-by-school basis, is entered in a Talent Pool. All children in this pool must be served at least by Type I activities of various types and durations. Some of these activities (e.g., visits, special lectures, concerts) should be open to all students for whom they may be appropriate, even those not in the talent pool. According to pupils' interests and available resources, Type II activities should also be available for talent pool children and others on occasion. Outstanding performance in Types I or II activities can be used to include nonpool children into the pool, and for all children should provide the point of departure for Type III activities for which student interest must be central.

The identification process leading to inclusion in the talent pool includes two qualities either of which guarantee a child's inclusion: (a) outstanding performance on a standardized or school test of scholastic

potential or performance, or (b) nomination by a teacher. Each school then adds a list of alternative criteria, for example, from among nominations by peers, parents, self or others, leadership, artistic talent, unusual and high level interests, and others. These optional criteria are selected to complement the types of special curricula the school is best able to provide for the gifted.

The concept of the talent pool is extremely valuable. It enables the school to respond positively to nominations, especially by parents. The school can place a child in the talent pool and observe performance in, say, Type I activities without feeling overly pressured to commit the extent of resources demanded by Type III involvement. The pool permits the different parts of the gifted program to be addressed to a fraction of the total school population, but also to avoid errors of exclusion in the selection process. By mating the pool idea with the progression of involvement in the three types of activities, it is possible to deal incrementally with the needs of broadly gifted and talented children right through to those whose abilities are profound and unusual.

## 4. Compatibility of these Proposals with the System of Education in Quebec

Another characteristic of this overall model is that it is a field-proven management plan that is entirely compatible with the philosophy of education in Quebec. Notably, it does not make a sharp demarcation between programs for the gifted and the regular classroom and school. To the extent that the classroom teacher can provide all three types of activities to the gifted or help in their provision, the children can be served in the regular classroom. Some children will require some time outside the classroom but

within the school in a resource-room or free-flow situation, or in the library or media centre. A small number may spend a considerable amount of time out of the classroom.

However, apprehension about this need for withdrawal should be calmed. First, the principle should be accepted that gifted children very much need contact with each other. It permits contact with their intellectual peers, is important to their social development since adult life is also based more on communities of interest and level than on age, and the regular classroom teacher gains opportunity to work with children who are further behind.

Second, and very much in accord with the Régime pédagogique, the time for participating in the programs for the gifted is gained in this model by a process called "compacting." This means that the required curriculum is done in less time and wherever possible children are pretested to avoid teaching them what they already know. It does not necessarily mean grade acceleration though this is a useful option for academically advanced, socially mature children. Compacting can take the form of completing compulsory topics in the first part of the year then doing the enrichment, or part of each week or month can be so compressed. The pattern of compression must be individualized, though groups of children with similar needs can effectively and efficiently pursue similar programs. The idea of compacting takes advantage of the option of adapting the prescribed timetable while assuring that special programming does not deny children the accomplishment of the common goals of the school.

### 5. Students are Evaluated on the Common Curriculum

There is another advantage to this model. All children can be

evaluated with regard to scholastic progress on a common standard, namely the compulsory curriculum. The gifted will in many cases do exceptionally well (underachieving gifted, a special case, are discussed in a later section). This avoids the unjust penalty one finds in some programs for the gifted wherein they are evaluated on their performance in the enriched program and get lower but satisfactory grades which have cost them scholarships and admission to competitive-entry programs at later levels. This risk can lead to gifted students declining to participate in special programs. The enriched part of the curriculum should only be subjet to internal and especially formative assessment. Where noted on a student's record, it should not normally be in place of a record of performance on the common curriculum.

### 6. Focus on Students' Interests

A final emphasis is on the question of student involvement in the curriculum in the form of choice among Type I and Type II activities, and the major responsibility for planning in Type III. Of course effective teaching includes helping the children to make and evaluate their choices, but in this model the children have earned the right to satisfy their own needs and interests through the compacting process. This also takes advantage of the idea of commitment in a definition of giftedness, and it is by capitalizing on interest that effective teaching also builds commitment.

### 7. Career Awareness

There is one other component which should be specifically recommended as part of a second cycle elementary curriculum for the gifted. Research

has shown that gifted children engage early in the process of career decision making. Furthermore their career thinking is considerably mediated by their awareness of their own strengths and interests. This is in contrast to much childhood thought about career, which is laden with fantasy about what they might like to be without much regard for the educational steps necessary to get there. Gifted children also report very high interest in higher education. It is therefore extremely important that a program of career awareness be available to these children so that they do not overly constrain their considerations. Such constraint of perspective is notable among girls and children from economically and socially disadvantaged environments. These special populations are discussed below, but the general point remains that a career awareness program stressing occupations which require high levels of education and commitment and the educational route to their attainment is a necessary part of a program for gifted preadolescent children. It would primarily be provided in Type I activities which other children should be free to attend if they wish. Some gifted children may very well use the incentive of this exposure to directly pursue Type III follow-up activities, for example in a project on the world of work or perhaps in the actual content of the occupation (it is not necessary to proceed sequentially through Types I, II and III; the activities may flow from each other in any order--the purpose of distinguishing the three is to ensure that they all occur, especially Type III). The present placing of this topic in secondary cycle one is too late for many gifted children and the general program is insufficiently weighted toward the kinds of career patterns these children are likely to

follow.

## 8. Content of the Curricula

The question of the general content of elementary curricula for the gifted will be addressed only briefly, since infinite variety is possible and desirable. The only serious limitations are the expertise of personnel willing to participate and the availability of teaching materials. These are discussed later in separate sections. The proposal of this report is that since the basic curriculum will have been satisfied in the proposed plan, the enrichment content should be permitted to extend any subjet already in the curriculum or to undertake any that is not. The only potential conflict with any MEQ regulation is in the formal teaching of English in French-language schools before grade 4. In order to avoid later problems, it would be useful for a policy to be stated on whether this prohibition can be applied to the independent learning of English by a gifted child who is covering the required curriculum more quickly through compacting but may formally still be enrolled in a grade less than 4, or to a child in a lower grade who, in the optional time created by compacting, requests to attend English classes in grade 4 or higher at the times they are taught. Pedagogically these are sound practices. Curriculum should be expected to develop within a school most rapidly in those areas where human and material resources are available, and in areas where the community provides resources for visits, expertise, and apprenticeships. It should be guided by the identified needs of the children in the talent pool, and not be limited to academic or cognitive goals.

It is extremely important that materials which are purchased or created

address high levels of cognitive, creative, and affective performance. Several suitable models exist to guide this selection and design: Bloom's (and colleagues') taxonomies in the cognitive, affective, and psychomotor domains, Taylor's Multitalents Model, the Structure-of-Intellect program based on Guilford, as well as models by Williams, Gagné, and others, including many programs in creative thinking, problem solving, and futurology. Most existing curriculum materials and such resource materials as encyclopedia primarily or totally address themselves to the acquisition of knowledge. They fail to involve the children in a most important part of a curriculum for the gifted, namely in the process of the creation and evaluation of new knowledge, its evaluation and application. The creative process must permeate the curriculum, be it a portion devoted to science, human relations, arithmetic or computers.

Finally, just as the computer is becoming part of the life of nearly every adult in our society and as it is part of a meteoric rise in interest in schools in Quebec and elsewhere, special attention is needed in the use of computers with the gifted. It is strongly urged that opportunities be available for learning how computers work in addition to how to use them, but especially to experience and reflect upon the computer as a human environment, on its impact on people and society. Such computer languages as LOGO provide opportunities for creative exploration in a computer environment, in programming, graphics, music, and more. It is important to note the nature of packaged instructional software as well, since most so far available are remedial or low level. There are, however, educationally exciting simulations and games which teach decision making as well as the

well as the high level content of certain subjects.

## 9. Conclusion

It is recommended that elementary school programs for the gifted be built around the models proposed by Renzulli in terms of a management system. The opportunity for limited acceleration should be used where appropriate and special attention given to career awareness education and the uses of computers.

## Division C Programs for the Gifted at the Secondary Level

### 1. Continuing of Programming

The first principle is that secondary schools have a responsibility under the Régime pédagogique to continue to appropriately serve children who have benefitted from an enriched elementary program or who have been accelerated. The secondary school also has the responsibility and opportunity to continue the identification process due to the opportunities in the new subject matter and expertise of its personnel for children to reveal talents previously unrecognized.

### 2. Cycle One

The separation of the cycles should be reflected in the organization of secondary gifted programs. In the first cycle (grades 7 and 8), it should be possible to **continue with a Renzulli model,** particularly in schools which are able to offer the program with each child in contact with a limited number of teachers as envisaged in the Régime pédagogique. Where it is necessary to follow the conventional secondary pattern of different teachers for every class, the cycle 2 pattern described below would more often be applied.

In order for compacting to be carried out in cycle one, it is necessary that the proposed limited numbers of teachers be assigned to their classes in **large blocks of time** including as many half and full days as possible, and that they teach in "home" or uniquely assigned rooms. If these administrative accomodations are not made, then there will be no opportunity for the students to spend meaningful, large periods of time to engaged in enrichment activities or to pursue them on a continuing basis. It should be

noted that gifted children often display extended dedication to a project, a process not at all facilitated by frequent rotation and the work having to be dismantled and stored every time or be subject to abuse.

The cycle one program should also, on a subject basis, permit students who have demonstrated their competence in the required subjects to **elect advanced courses for which they are academically eligible** at any level in the school, including those which lead to high school leaving credits, and, when the work has been satisfactorily completed, to take the final examinations. This may lead to some acceleration of graduation, but if the overall effect should not be excessive, remembering that (a) this is the second recommendation and accompanies the presumption of a program of enrichment of the types proposed by Renzulli, and (b) students who would accelerate tend to do so in a limited range of subjects (for example in mathematics, sciences, or third languages) in which additional courses are still available. Very few students will normally accelerate in all subjects, and these are discussed separately below. It seems reasonable in the short term not to set any limits on this option, but to review the outcomes after two or three years as a part of a full evaluation; if there is evidence of abuse, appropriate guidelines can be established.

The third element of a cycle one program should be to permit **"testing out"** in courses. At the end of grades 6 and 7 students should be permitted the opportunity to demonstrate their mastery of specific courses in which they have competence in the content and be permitted to enrol in the next level course the following September. To avoid the proposed limited numbers of teachers having to teach two courses at once, though frequently this challenge is happily accepted, as at the elementary level it should be possible for pupils to visit other classes as needed to obtain appropriate

specific instruction.

Finally, a cycle one secondary program should address the particular **personal and developmental needs** of gifted young adolescents. While décalages in development are quite visible in primary children, by this age gifted children may be adults in some ways, and preadolescents in others. Their multiple interests and talents, involvement in uncommon pursuits, and potential or real commitment to work and study, often set them socially apart. They may be shy, unskilled in certain social relationships, and enduring identity crises resulting from too much choice or excessive pressure of expectations from themselves and others. Of course many gifted children suffer none of these other problems, but as a group they are at higher risk in this regard.

Their courses in personal and social training and in career guidance should therefore be specially adapted and at least partly taught in a separate group comprising children in the talent pool. Considerable attention should be given to skills which these children may use themselves or with their peers to cope with or overcome their unique problems. The course in Career Guidance should take account of the recommendation for much earlier attention to career decision making at the elementary level. It should (a) to help gifted students recognize the breadth of their interests, to consider which will be satisfied by a career, which by private pursuit such as a hobby, (b) contemplate the interaction of work and family life as adults as it affects both men and women, and (c) base their decisions not only on a match of abilities and job requirements but also on interests, so as to maximize commitment, opportunity for further growth and creative involvement after entering the world of work, and on occupation as a major element of life style, covering such topics as occupational status, earnings,

likelihood of shift work, turnover of employment, and the need for geographical displacement to maintain employment. The same facts will be evaluated positively by some, and negatively by others. Other criteria than personal should also be discussed such as economic and political influences on opportunities in the world of work.

In other main respects, the characteristics of programs for the gifted in secondary cycle one are covered elsewhere in this report.

**In summary,** secondary cycle one programs should be continuous with elementary programs and also be organized primarily according to the Renzulli model. This requires the scheduling of large blocks of time with individual teachers. Second, on a subject basis, qualified students should be able to demonstrate prerequisite competence and elect more advanced courses, including those which may accrue high school leaving credits. Third, testing out should be encouraged to avoid redundant teaching. Finally, the courses on Personal and Social Training and Career guidance should be specially adapted.

### 3. Cycle Two

In the second cycle of the secondary school, the design of programs for the gifted should give particular attention to the following influences. Gifted children are capable of and, if they have not been discouraged by circumstances at home or school, are highly predisposed toward pursuing higher education. This motivation can be greatly enhanced by bringing that goal closer. Academically gifted children can be well served in the development of their talents by subject specialization and by the high level of expertise of many teachers.

The nature of school organization requires an adaptation of the Renzulli model, and it is proposed that this model assume secondary importance in programs for the gifted at this level, on the assumption that the pupils are served by the recommended procedures at earlier grades. This will be resumed below.

The principal procedures for serving gifted students in the upper cycle of secondary school should be the opportunity to **elect courses at appropriately advanced levels and to maintain the principles of compacting and Type III activities** within every class under the supervision of the course teacher in the first instance, but aided as necessary and possible by volunteers, experts from the community, other teachers, and the library.

Every secondary school should have the **responsibility for programs for the gifted assigned** to a responsible and trained coordinator. This responsible person is in a position to help ensure that students on their free time are not inappropriately involved, but there should be encouragement and acceptance of unstructured time: daydreaming can be useful and enjoyable and as long the behavior does not disturb others. Gifted children working independently following compacting of their curricula should not be required to "look busy" at all times.

The choice of appropriate electives can be achieved within the school when advanced courses are offered. Where possible, such **options can be shared between nearby institutions** and regional educational authorities should encourage such availability of the most advanced secondary options.

A potentially exciting method of accomplishing this goal while simultaneously giving students a taste of higher education without removing pupils unnecessarily from the school environment is to **encourage cross registration in CEGEP or, for certain subjects, university courses.** This can

be done in two ways. First, on the strength of a letter of recommendation from the school, students should be able to enrol in one or more college courses on school time. Time missed from school, in whatever courses, should not have to be made up as long as the student maintains satisfactory progress through compacting or testing out. Teachers must not create extra penalties for such students but have the full right to expect adequate performance in their courses. The distinction to be made is between demonstrating competence and doing all the work that some other pupils must do to achieve the competence (this point applies to all levels of schooling). This procedure is adequate when relatively small numbers of pupils are involved in the subject or during the early stages of development of the program for the gifted. Night or summer extension courses are acceptable if necessary, but suffer from being additions to the full load of school. The second approach brings **college or university courses into the high school.** When numbers warrant, sections of college courses can be taught in the high school. Over one hundred such programs are in operation in the United States, the closest to Quebec being at Syracuse University in New York state. The courses may be taught by high school or college faculty, either from the regular calendar of courses or with courses specially designed for the occasion. The details for operating such programs are provided by Wilbur and Chapman (1979). They bring many special advantages. The vigor and challenge of college courses are experienced in the supportive school environment. Cooperating colleges and universities would gain a powerful recruiting tool which not only serves them individually but also the entire network of higher education in Quebec, since the "banking" of the acquired college and university credits enables the students to anticipate accleration of their college and university studies with the

added likelihood of these studies being completed here.

Some liaison is needed at general levels to bring these proposals into being. For example, it would be necessary to agree that students in recognized programs for the gifted be able to take such courses for credit even though they may not yet possess certificates of completion of secondary or collegial studies. The participating higher education institutions should be permitted to count these enrolments among their full-time equivalences.

It is reasonable to impose a progression of decreasing limitations on the taking of such courses. It might be appropriate to suggest that in the first instance only one such course may be taken at a time and in a subsequent semester, up to two or three. Successful completion of these should terminate limitations. A further advantage is the economic protection this procedure affords to the school: while serving as a vehicle for opening new academic vistas to its pupils, the student remains enrolled in the secondary school, preserving enrolment and teaching positions yet freeing some teaching time to address to other needs, such as the supervision of Type III projects. The time saved by such programs should be available to the gifted on a priority basis, but shared where possible.

In order to provide a basis for identifying students as being served by a program for the gifted at this level, in addition to compacting and Type III activities, **three other elements of the Renzulli model should be retained** in modified form. First, the **talented pool** should be kept as a register of involved students, second, as a basis for bringing gifted students together in special activities, especially those which provide a social support group, and, third, as part of the continuing process of the identification of giftedness and talent in new pupils to the school and among those whose exceptional abilities are first revealed and recognized at this stage of their schooling.

To facilitate their absorption into the principal program elements proposed in this section, a **variety of Types I and II activities** should be made available. Some of these, notably in the exploration of new subjects, socio-affective development, career awareness, and thinking skills can be shared with the cycle one students. Age differences need not be given undue importance. However, some of the unique problems of late-recognized and older gifted adolescents may require specific attention. These potentially include anxiety about career decisions, relations with the opposite sex, underachievement, and identity crises related to self-concept. These Type I and II activities should be designed for this newly identified group but open to any other interested student normally on the same condition of maintenance of satisfactory work in the compulsory courses.

The fourth element of a comprehensive program for overall academically gifted children at this level might be provided by an internationally recognized senior secondary program, the International Baccalaureate (IB). This program is modeled on European curricula of the lycée, gymnasium, and grammar school. The curriculum is available in French and English, and is already offered in 20 public and private schools in Canada, and is applied for by two private schools in Quebec, one English and one French. The curriculum coexists with the regular curriculum and membership in the network provides assistance in adapting it to the school. This appears to be an excellent alternative for senior, highly motivated, academically capable students. It could be very interesting to permit a limited number of public secondary school, perhaps three or four, to offer this program, but this number need not remain fixed. Which schools would be selected could be based on competitive application with the criteria for approval including several incentives to establishing programs for the gifted.

For example, if the International Baccalaureate proposals were to be considered for implementation two years after these recommendations might be approved, school applicants could be required to (a) propose how they would integrate the program in their structures and budget, (b) demonstrate that the other elements of programs for the gifted are in place, and (c) outline their medium term program plan for the gifted. There is sufficient prestige in the IB program to motivate such activities, and considerable potential for the public sector to compete effectively with private schools with regard to the image of academic vigor in particular. The IB diploma is recognized in universities around the world. It would be appropriate for it to be given appropriate recognition in Quebec in conjunction with advocating limited availability at the senior secondary level. The IB relies heavily on guided independent study, consistent with the notion of Type III activites above. Some courses are formally taught, however, and could cost effectively be available as options for students otherwise participating in the gifted program, including the possibility of travelling between schools. Since the IB overlaps CEGEP level studies, participating schools should have a strong liaison with a CEGEP.

Fifth, and perhaps most controversially, is the alternative of **radical acceleration.** The need for this option is greatly reduced if the first two or especially three proposals are implemented. Nevertheless, no existing program is so carefully documented or so unambiguously succesful in meeting the needs of the students selected than the Study of Mathematically Precocious Youth (SMPY) at The Johns Hopkins University, Baltimore. The program has been expanded to other cities and to science and literature. Briefly, children of cycle one age are offered the opportunity to take the College Entrance Examination Board mathematics test. Hundreds of these

young adolescents who have never studied high school mathematics have been found to score in the 90th percentile on this test designed for graduates of four years of such study. These children are offered a "fast mathematics" course one afternoon a week after school during the next year. Those who are successful (modal age 14 to 15) are offered a regular place at The Johns Hopkins (and now several other universities) in any subject. How well or poorly they did at school was not a major consideration. The students do well and over 200 studies of them and other accelerants offer no evidence of more social problems than they would have experienced still in school. Another project at the University of Washington, Seattle encouraged similar acceleration by allowing upper elementary students to take one, then two, then any number of university courses.

The purpose in mentioning these is to emphasize the challenge in creating programs for gifted children. In far more pupils than many educators expect, the abilities and potential for performance are astounding. The SMPY and Seattle models do not fit well at all the plans of the Regime pédagogique. They are, nonetheless, valid and interesting alternatives, and point to the level of challenge which many of these children need. In the short and medium term, then, it is recommended merely that secondary students (a) who complete the required curriculum at any age and (b) are regarded by their teachers, parents, and the guidance staff as being sufficiently socially mature should be able to receive their secondary diplomas and proceed directly to CEGEP. This will be a very small minority as noted above. It would be appropriate to review the statistics after 5 years or so, and reassess such a policy at regular but not too close intervals. In effect, limited tolerance of radical acceleration, but not intentional promotion of it, is recommended. After such a period, if the interests of

the children are to be given priority, and if secondary schools have not adequately adapted to the diversity of needs represented in the gifted, such alternatives should be seriously considered for expansion.

Two other specific elements should be a part of secondary programs. First, within career education, it is useful to include periods of **"executive internship,"** apprenticeships with professionals and others. Gifted children are excellent "ambassadors" and open the doors for such participation by other children. In direct benefit, these can be excellent Type III activities if the children can be involved in dealing with real matters of concern to the volunteer. They are also realistic exposure to the world of work, a world not easy to fully represent in school.

Finally, there is a regulation regarding the taking of high school leaving examinations which requires reconsideration if the above proposals are to be implemented. At present, in order to take the examination, the student must "have taken the course covered by the examination to the satisfaction of the school board" (Régime pédagogique, Division IV, Section 48). The rule does not have to be changed, but in its interpretation and application school boards should be satisfied that students in the talent pool be **allowed to take high school leaving examinations without having previously enrolled in or attended a particular course.** As a formality it should be possible to register them at that time.

**Summary.** Programs for the gifted in cycle two of the secondary program should be based primarily on the availability of advanced courses in which compacting, Type III enrichment activities and independent study are explicitly encouraged. Second, cross registration for CEGEP and some university courses should be facilitated, on campus during release school time or through college courses offered in the schools. Third, the principle of the

talent pool should be retained and also Types I and II activities especially for newly identified gifted pupils. Fourth, the International Baccalaureate might be offered in a small number of schools (in collaboration with CEGEPs) for senior all-round academically gifted students. Fifth, the door should not be closed to very limited radical acceleration (2 years or more). Sixth, attention to the world of work should be continued by encouraging high level part-time apprenticeships. Finally, seventh, students should be allowed to "test out" on high school leaving examinations. These elements must coexist in a coordinated fashion, serving each other, in order to provide the maximum effectiveness and efficiency. Finally, and generally, previous comments regarding the level of content apply to all elements of the curricula, as do those on the naming of persons rseponsible for these programs.

## Division D The Arts

### 1. The Arts are an Appropriate Curriculum for the Gifted

If any part of this report might raise objections with regard to possible costs, it is the education of gifted (and all) children in the arts: music, dance, theatre, drawing, sculpture, etc. Nevertheless, it is through the arts that children develop their esthetic senses, especially acquire skills of self-expression, experience opportunities for creativity, respond to the challenge of adjudication, and directly witness the products of their abilities and efforts. It is clear however, that, most elementary schools no longer have any specialized offerings in the arts, and only in cycle one is art compulsory at the secondary level. While it is possible to easily defend the need for the arts for all children, this report will restrict itself to a few brief statements about the gifted. It is hoped that this brevity will not be misinterpreted with regard to importance.

### 2. Special Schools

First, special schools devoted to the arts are an excellent way to develop artistic talent in gifted (and all) children at both the elementary and secondary levels. Three such schools exist in Montreal, Ecole Le Plateau (CECM), FACE (PSBGM), and Ecole Secondaire Pierre Laporte (Ste-Croix). At the post-secondary level there is also the National Theatre School. These schools are precious resources which must be preserved and nurtured. The network of scuh schools should be enlarged.

Among the advantages they offer are strong peer and institutional

support for unusual activity. It is hard for a young child to explain why playing an instrument or sculpting is a priority. In such schools it is not necessary to explain.

Separate schools devoted to the arts contain some of the elements of the proposed programs for regular schools: compression of the regular curriculum, advanced levels of courses in areas of specialization, and considerable opportunity to excell, at least in the arts. Nevertheless, such schools should also add the recommended components of comprehensive programs for the gifted except that at the secondary level some advanced traditional courses could be taken at nearby schools, if such exist.

### 3. Arts for the Gifted in Regular Schools

Except to strongly advocate general and selected high level arts curricula as a vital component of the education of the gifted, it is beyond the competence of this report to recommend specific action. In view of the existence of specialists in the arts in the educational community, it is suggested that a task force be created of experts in the arts and giftedness to offer specific recommendations on all aspects of this issue.

Unless public schools devote themselves to the development of artistic giftedness then an implicit verdict will have been issued reserving the arts for children whose families can afford private tuition.

## Division E Special Schools

### 1. A Legitimate Place for Special Schools

It is not only in the arts that specials schools are a reasonable alternative in special cases. The factors which can support such schools inlcude (a) the existence of a sufficient number of students to be served, (b) the need to have very expensive facilities or equipment which are not portable, (c) the assembly of a highly specialized faculty whose impact would be lost if diffused, and (d) the identification of goals best served in this manner.

Outside the arts it is difficult to foresee such schools for the gifted at the secondary level or lower if all the proposed components are both present and active. However, if regular schools do not do a good job providing for the gifted, then special schools increase rapidly in attractiveness.

### 2. Special Schools in the Absence of Good Programs for the Gifted in Regular Schools

At the end of the short term, the need for several additional such schools could be foreseen in these circumstances. At the elementary level, the greatest attraction would be for schools emphasizing the arts. At the secondary level there could be schools dedicated to music (such as the Yehudi Menuhin School in England), mathematics and science (such as the Bronx High School of Science, the new, residential North Carolina School for

Mathematics and Science), theatre (a parallel to the music and dance programe at Pierre Laporte or music and art at FACE), and languages and literature. Other schools may seek to organize to offer the International Baccalaureate as a core curriculum or to attempt the types of high school and college liaison that were outlined.

Such a range of special schools is not at the moment advocated. It should, however, be given fair consideration if programs for the gifted are not otherwise provided.

### 3. Special Schools for the Gifted in Conjunction with Well Developed Programs for the Gifted in Regular Schools

In addition to the provision for the arts, which this report recommends be regarded as permanent, the door should not be closed to a small number of proposals for special schools for the gifted if they can identify and serve needs of gifted children who cannot in a less extreme manner be served as well.

One experiment might be considered that could provide programs for the gifted more quickly than by beginning in regular schools, since many of the latter are highly resistent to directly serving the gifted. The proposal would be to permit perhaps up to one in ten schools to become special schools for the gifted, not narrowly specialized with regard to content, and offering the full range of curriculum elements proposed. In other words, these schools would initially be composed entirely of talent-pool pupils. The schools which are approved to engage in such an experiment would occupy only half to two-thirds of their buildings and be permitted to remain solely for the gifted only for three years. At that point they would have to admit

any student within the jurisdiction of the board up to the capacity of the building.

There is a risk including this idea in the present report, but although it contains a degree of fantasy, it may work very well. Programs for gifted children are an increasingly high priority for parents. The prospect that such an approach might even be contemplated could motivate many regular schools to fulfill their obligations to the gifted.

## Division F Role of Private Schools and Private Schools Operating in the Public Interest

### 1. Examples of Compacting

These schools, including independent and ethnic and religious schools, do not as a group provide any systematic programs for gifted pupils, however, they do, on an individual basis, provide good examples of several elements of the proposed programs. One of these is the principle of compacting of the regular curriculum, especially visible in the religious and ethnic parochial schools. The general curriculum is taught in about two-thirds of the regular time, and as many as two additional languages and a cultural program is added, usually to an extended school day (8 hours is not uncommon).

### 2. Closer Relations with the Public Sector

In particular, those private schools which operate in the public interest and are thereby subsidized by Quebec should be expected to participate in the offering of programs for the gifted. They should be eligible to benefit from consulting services and, materials produced or sponsored by the MEQ and its regional offices. The opprtunity should be taken to benefit from their collective experience with compacting and alternative high-level programs.

## Division G Special Populations among the Gifted

### 1. Girls and Women

When programs for the gifted are created, there are several general principles of organization to be noted, however, there are also special groups of students which require particular consideration. The first of these groups, and in some areas a numerical majority of the pupils, is girls.

Special attention to the needs of gifted girls includes attention to pursuing equality of the sexes in the world of work and encouragement to pursue the study of mathematics through the provision of suitable role models--research has shown these models to be young women seen by young girls as they would like to be. Visible high achievement has not always been valued among and by girls and women. Girls may therefore require extra attention to the development of self concept, and considerable support as they assert themselves in a real world still dominated by men. Boys and girls should share in discussing how both should have the opportunity to contemplate career and family as adult goals and that the potential for conflict in this combination remains more likely to be perceived and experienced by women.

### 2. Minorities and the Culturally Different

Children from some cultural groups, for example Asian, are taught early that it is impolite to stand out among colleagues. This imperative for modesty can mask giftedness as often recognized. Other cultures, as from some parts of Africa, regard giftedness as possession by evil spirits. These

are extreme examples intended to direct attention to the issue. Minority status in itself is actually a source of at least as much advantage as disadvantage. It is encumbent on programs for gifted children to include selection criteria which provide opportunities for children to be selected even if some of their abilities are masked or rare. Programs should capitalize on the special talents and cultural richness the children, their families, and their community institutions can provide for the benefit of all. Qualities acknowledge as gifts are certainly culturally determined. It is important that no minority or culturally different group be seriously underrepresented in programs for the gifted. Two ways to protect this representation are contained in the Renzulli model: selection conducted on a school-by-school basis and the flexibility in the size of the talent pool.

### 3. Economically Disadvantaged

In the past, students from poor families have been underrepresented in gifted programs. Such children have indeed less often demonstrated gifted behavior, but they are no less potentially gifted. The lack of financial resources in the home, the debilitating social effects of poverty, inadequate diet, lack of privacy and study space in the home, in various combinations conspire against the development of giftedness. Programs for the gifted must not discriminate against the potentially gifted among the poor. The younger the age of involvement the better. It is quite likely that successful programs for such children will include attention to developing commitment, interest in academic and creative endeavor, and in expanding the children's conceptions of their own futures. Several excellent programs for gifted children exist in economically disadvantaged communities in the U.S.A.,

including some for preschool children.

### 4. Native Peoples

Native children come from environments that can be characterized as culturally different and economically disadvantaged. Schools serving these children should also seek to take advantage of the special qualities of the children and their communities. Inappropriate definitions of giftedness should not be imposed from outside, but the suggested models are equally suitable.

### 5. Rural and Isolated Communities

Access to outside resources is of course limited to varying degrees. Since the proposed program is built around the school as the basic unit, most elements of the recommended pattern can be implemented. Rural and isolated communities have no lack of real problems with which to cope, yet are often short of qualified persons to solve them. These issues can be central to Type III activities undertaken by the involved children. It is extremely important that the school coordinator of programs for the gifted be enterprising in bringing visitors to the community into Type I activities, and using such facilities as television and film.

One risk to be carefully thought about in these circumstances is the permanent loss of the most able children from such communities. Career awareness programs may accentuate this. A delicate balance is often active between the children's and community's needs. The proposed basic model for programs helps to resolve this dilemma by the nature of Type III activities which can help gifted children develop their abilities, creativity and

commitment to improving life in their home areas, without removing their right of choice.

Particular attention should be given to assuring that special MEQ services which already exist should become capable of serving the needs of gifted children and their teachers for help in identification, materials and in-service training. This includes suitable training of Agents de développement pédagogiques.

## 6. Underachieving Gifted Children

Most underachieving gifted children are invisible because they appear to be children of average ability. The key to avoiding underachievement is self concept. Some gifted chilren purposely provide mediocre performance due to boredom, so as to avoid ridicule by classmates, to reduce parental and teachers' pressure for sustained high performance, and in the case of some girls to remain oopular. Some underachievement is the result of cultural differences, restricted opportunity at home, physical or emotional handicap.

The first challenge is to the prevalent attitude that gifted children must perform or behave well to earn a place in any special program. The combination of impediments may be exaggerated in some learning situations, and involvement in the program for the gifted may be necessary to raising the level of achievement. Every definition of giftedness includes equal weight for potential and realized giftedness.

The second challenge is therefore for identification. Performance on standardized aptitude tests, interest inventories, self-selection through trial participation, peer and parent nomination should be scrutinized carefully in

a search for such children. Many appear accidentally as a result of individual testing of children being diagnosed for emotional and other problems. The Revolving Door identification model suggests means for collecting such information. Underachievement is the one condition where individual testing, which is quite expensive, is justified. In the presence of concommitant problems, these costs are rarely in addition to those of services which are already in place.

Underachievers should be equally welcome in programs for the gifted, and Type II activities directed at study habits, attitudes, etc., should be available to support them in the more challenging context. Extended contact with highly motivating Type I activities is also a part of the solution.

### 7. Handicapped

While it is sometimes convenient to begin to understand the concept of giftedness in contrast to learning disability, in fact there is nothing to prevent intellectually or creatively or otherwise gifted children from also being blind, deaf, crippled, emotionally disturbed, cerebral palsied, chronically ill, or in any other way learning-disabled or handicapped.

Such children should not be excluded from programs for the gifted. Their strengths should be served at the same time as action is taken to overcome their problems, and the need to attend to their disabilities not used as an excuse to postpone attending to their gifts.

Serving some of these children may require that programs for the gifted be extended to institutions other than regular schools, for example, hospitals, psychiatric clinics, and schools for the handicapped. Since most of these institutions have presently contracted for educational services with

major school boards, at least some elements of the programs should be generally available, perhaps in cooperation with the nearest regular schools.

### 8. Delinquents

Gifted children in trouble with the law include subpopulations of gifted, especially among girls and children from rural areas. Programs for the gifted require two special adaptations for this group. First, and for all gifted children, good behavior is not a prerequisite for inclusion in the talent pool. Once included, children who are asocial or who cannot interact with others may require separate attention, but they should be served. A major benefit will result for their sense of worth.

Second, juvenille detention and residential centres, also usually educationally served by school boards, should include major elements of programs for the gifted within their curricula.

## Division H Services Among Schools

### 1. Transfer of Pupils

One unfortunate practice that may be observed elsewhere occurs when a family moves and the child attends a new school. Where such a narrow selection criterion as IQ is used on a priority basis, a child having a score of say 132 who moves from one area where the criterion is 130 to 135 will suddenly be excluded from the program. Under the Renzulli model, any child in the talent pool as a result of one of the alternative criteria may find that the list of alternatives is different in the new school.

It is extremely important to establish the rule across all schools that a child who transfers from a school, having been in the talent pool, is immediately included in the talent pool in the new school.

### 2 Cooperation in Staffing

This applies particularly to the "feeder" elementary schools of a secondary school. Particular encouragement should be given to voluntary arrangements whereby specialized personnel from the secondary school may take part in the elementary program, even if only for brief periods in Type I activities or in a mentor relationship. Suitable use may be made of teachers on "availability" when this condition exists.

Individual or small groups of gifted elementary children may also make good use of high school facilities such as laboratories, shops, and the library.

These processes and others would be facilitated by regular meetings of the gifted program coordinators from each high school and its associated elementary schools. The question of services to schools is considered

separately. It is also possible for schools to share their lists of special resources, and such meetings are an appropriate forum for this.

## Division I Teaching Materials

### I. Availability of Materials

Once children are identified and teachers are ready to begin, the biggest challenge is in the acquisition of suitable materials. Libraries already contain a large amount of useful resources, especially for Type III activities. Type II activities benefit considerably from didactic and pedagogical materials specifically for the gifted, as do some Type I exeriences. The need for special materials is especially felt at the elementary level where limitations on reading ability, maturity, interests, and even size make appropriate regular content unsuitable.

A large and rapidly expanding range of curricular materials especially designed for the gifted is now available. At least two modest but carefully chosen selections of such items are now available in Quebec for educators who wish to examine them and consult the catalogues of publishers. The first such collection is the McGill Giftedness Collection in the Curriculum Laboratory of the Education Library, McGill University. This collection also contains several examples of units prepared by suitably trained teachers during their studies, and some exchanged or contributed from elsewhere. Virtually all available units are so far in English, but one publisher in Ontario has produced nineteen units in French which will be available at McGill early in 1983. The second collection is at the Professional Library at the Protestant School Board of Greater Montreal. Several other less accessible collections exist at other school boards.

Two recommendations follow. First, by some mechanism the MEQ should facilitate the publication in French of several of the existing units

which are worthy of translation. A small number of the best examples should be done early as part of the setting up of programs. The production of original materials in French will, as it has been in English, a natural outcome of the growth of programs and the training of personnel. It should be noted that virtually none of the commercially available materials has been produced by a major publisher of school textbooks. Nearly all are produced by teachers of the gifted and consultants based on materials they prepare for their own classes, and are privately distributed or through small, independent companies. The development of programs for the gifted in Quebec would also likely lead to growth in this interesting type of commercial activity. It is important to note that the available materials are in most cases simple in construction but many are high in quality of content for they actually have been tried out in programs with gifted children.

The McGill Giftedness Collection also includes a nearly complete set of publisher's catalogues.

The second recommendation is that sample materials such as in the McGill collection should be available to teachers in regional collections at universities and school boards. In the service of rural and remote programs, at least one such centre should have duplicate copies which could be mailed out on loan. There are also several very useful serial publications which, even though they are all in English (including one published in Bulgaria), should be included in such resource collections.

It should be noted that these are both very modest proposals: gifted program resource centres in parts of British Columbia, Ontario, New York, Pennsylvania, California, New Jersey, and other states have tens to hundred of thousands of dollars worth of materials and equipment. It remains possible, however, to do an excellent job more modestly, especially with the

cooperation of public and school libraries in those communities where these are of high quality.

## 2. Criteria for the Design and Selection of Materials for Programs for the Gifted

Taking cognizance of the comprehensive criteria generally applied to textbooks by the Régime Pédagogique (Elementary--Division I, Subdivision 2, Section 20, Secondary--Division II, Section 5), the following additional recommendations are offered.

(a) In view of the nature and limited publication of these materials and their international origin, that the use of the international measurement system not be obligatory, but in any translation the adaptation should be made.

(b) All commercially purchased materials shall have been field tested by the publisher or author with gifted children.

(c) All materials should be clearly identified within each unit or in a teachers manual or catalogue as to how it is designed to be especially appropriate for use with gifted chidlren, for example (but not limited to) each having been prepared according to a particular model of curricular design (see Section 3 below).

(d) There should be a policy of examination approval or refund for 30 days for materials kept in as-new condition and not available for examination at a Quebec bookseller.

### 3. The Design of Curricular Materials

The principal challenge in designing materials specifically for the gifted is to ensure that the activties they generate for the children are at an intellectually high level. This does not neccessarily mean more difficult. For example, the long-division of large numbers may be difficult for a primary child, but understanding what division means even with simple numbers, how it is useful as an arithmetic operation, and assessing whether it was the correct operation in a particular problem are higher level.

There are several available models and strategies for doing these (Bloom, Taylor, Williams, Meeker, etc.--to be discussed under teacher training). The important point is that they be used, and that the preparation and selection of materials reflect their use.

Teachers and students will also, of course, use a wide variety of materials not specifically prepared for the gifted, and this breadth is to be encouraged. In their use, however, questions and problems are set as classroom questions, group discussion topics, homework, and tests. In all of these contexts there must be equal attention to assuring a large proportion of high level activity in every domain--cognitive and creative, affective, and psychomotor.

## Division J Knowledge of the Principles of Organization of the Curriculum for the Gifted

The recommendations and guidelines contained in the preceeding sections are also a part of the curriculum. A major overall objective in the education of the gifted is to help them become effective independent learners, in other words, to help them construct curricula for themselves--which explains the importance of interest and commitment in Type III and other activities. To develop this independence, pupils must have an understanding of how appropriate curricula are constructed for them both with regard to the management of the learning situations and the content. Toward this goal, an important Type II activity for every child in the talent pool is to become acquainted with the Enrichment Triad and Revolving Door Identification Models and with the curriculum design models used in the preparation of their materials and lessons, and for them to apply this knowledge in their own decision making in the program, including the undertaking of independent learning experiences which are indeed appropriate to them.

As will be pointed out later, but worth anticipating here, this familiarity with the models is equally important for the parents of gifted children.

## Part III Institutional Responsibilities

### 1. An Organizational Proposal for the Differentiation of Responsibilities

The principal responsibility for the provision of programs for the gifted rests with individual schools. Liaison with other local resources should be at that level. In order to do this job well, however, schools must be able to draw on specific shared services from school boards and other district or regional offices. Finally, these in turn will be dependent on certain functions performed at the level of the ministry. The present purpose is to assert the importance of the school and the need for a suitable division of responsbility. Suggestions for such a division follow. The role of the school has been defined in Part II of this report.

### 2. Role of the Ministère de l'éducation

Eight specific roles are especially appropriate to the ministerial level, primarily at a catalytic level rather than the direct provision of services.

(a) Promote legislation or regulations as required to implement programs for the gifted as a mandatory part of the educational services provided in schools. In conjunction with this is the promotion of exceptional adaptions of certain existing rules such as minimum school entry ages for developmentally advanced children, the suggestions regarding the dual registration of advanced secondary students in courses at the tertiary level, permission to take high school leaving examinations without having attended the course, and others which have been

enunciated or may arise. It would be especially appropriate to group these in an identifiable way as has been done with the laws and regulations regarding learning-disabled children. This recommendation implies explicit recognition of the existence of gifted children in schools and of their special educational needs.

(b) Sponsorship of leadership training for professionals in the education of the gifted. This includes workshops, courses, visits to exemplary programs in and outside Quebec, seminars, evaluation training, direct contact with several parts of the curriculum and materials design, and particular attention to program development on an on-going basis. The personel attending such training would be school administrators, gifted program coordinators, consultants, agents de développement pédagogique (ADPs), school commissioners, regional and central MEQ personnel with responsibility (e.g., personnel in the evaluation branch), and teachers who take a leadership role in their schools. An advantage of leadership training being a direct function of the MEQ is to stress the ministry's commitment to the programs, an important incentive to continued action at all levels. There is also the benefit of ongoing feedback and sharing on the progress of programs.

(c) The parallel sponsorship of a continuing and recurring program of inservice activities for teachers working with the gifted. In view of the proposed model, this could be a majority of the teacher corps. The program could also provide sensitization for staff not involved. The mechanisms for these activities already exist through the system of professional days and professional improvement committees. It remains to ensure that these programs include regular attention to the gifted, not all at the introductory level, which is essentially the present

situation. This program should practise what its particpants are asked to do with the children, therefore these inservice activities should involve a wide range of Types I, II, and III activities with considerable input from the teachers.

(d) Maintenance of a range of research and development projects. The word "maintenance" is used intentionally since the infrastructure is already in place and functioning at a very modest level. The FCAC research grants program recognizes l'Enseignement aux surdoués as a fundable category and at least two team research projects are currently funded. There is every reason to expect that other high quality proposals on giftedness would be eligible for FCAC support. The MEQ has also funded several experimental programs for the gifted in school boards and schools around Quebec, even at this time when there is no formal recognition of the category of gifted students. This openness with regard to both research funding and support of innovation is to be applauded, as it is quite unique in North America. Close observation of several of the subsidized school experiments in the education of the gifted suggets, however, that perhaps less of a burden to demonstrate "research" goals be placed on "developmental" programs. There are at least two reasons for this. First, school personnel are for the most part not trained in the methods of educational research, and only the largest school boards have staff with research responsibilities of any kind. The time and effort required to collect data and report on cognitive or affective goals resulting from such programs is not always the most effective us of the staff's energies. A more appropriate form of accountability in developmental projects might be to report on the manner in which the operational parts of the proposal have been

implemented, and the extent to which they conform to the models and guidelines proposed. Second, many of these developmental projects are required to report after a period of time as short as one year, a time lapse which may at best show an attitudinal change, and even this can be partly attributable to the enthusiasm of starting a new project. In essence, funds for strictly developmental projects should be accounted for more in terms of establishing what was reasonably proposed than in demonstrating any particular educational outcome. This would take maximum advantage of what school personnel can do best. Research funds should similarly be primarily addressed to personnel and institutions equipped for that function. The "in-between" category of evaluative studies may require joint efforts.

(e) Specific promotion of a small network of demonstration projects, especially up to the end of the medium term, is an appropriate MEQ responsibility. The basic unit of such demonstrations would be a secondary school and at least half of its feeder elmentary schools. The purpose of these projects is to satisfy the need for teachers and administrators to see a good program in action in a context which they recognize as similar to their own. The special status associated with being a demonstration project would be an incentive to seek such involvement. A suitable number of these might be ten, urban Francophone projects in Montreal, Hull, Sherbrooke, Quebec, and Lac-St-Jean, and rural projects in the northwest, eastern townships, and either Gaspésie or the north shore, an urban Anglophone project in Montreal and a rural one in the eastern townships.

(f) General planning and program evaluation are also appropriate activities for the MEQ. The program evaluation should be "formative" in nature,

striving to improve the quality of the programs. Within the planning function would be assuring the availability of materials, notably in French. In this context, a senior official of the MEQ and in each Direction générale should have explicit and particular responsibility for the dossier of the gifted.

(g) A very small point, actually a part of the consideration of curriculum: the MEQ could identify positions within its structure that could take the lead in providing executive internships for gifted students seeking such experiences.

(h) Finally, it is very difficult to initiate new and demanding programs during any period of uncertainty or stress in the relatonships between personnel and employers. Excellent programs for the gifted cannot be imposed. The entire process of implementation requires a cooperative effort in which the interests of the children are paramount but neither are the interests of others ignored. The present proposals offer a framework which nopefully allows a wide range of local adaptation. The responsibility for emphasizing the facilitative nature of these recommendations lies with the MEQ, while stressing the need to act and appropriately serve the needs of gifted pupils.

### 3. Teachers, Specialization and Certification

In areas where programs for the gifted are in place, there is active discussion about the formal requirements for teaching these children. The idea that teachers of the gifted must be specially licensed is most appropriate to a program where a major focus is on full-time withdrawal or on separate institutions. While such alternatives are given time

endorsement in this report, a substantial role is advocated for regular classroom teachers who wish to be involved. The delay inherent in training for compulsory certification can also keep some of the best teachers out of a program. The insistence on licensing also ignores the ability of an able professional to learn independently through reading, attending workshops conferences, training institutes, inservice courses, etc. There are alternatives to compulsory certification.

The general principle for all personnel involved in programs for the gifted should be that they enter the programs with a basic background of expertise about giftedness and the education of the gifted and that this expertise will continue to grow during the period of involvement. It would be the responsibility of the teacher, school, and school board to report on the formal steps taken in this direction. Not all these steps need be on the topic of giftedness, but may for example be in the areas of the content of the curriculum.

Actually holding a certificate or diploma in the education of the gifted should be optional, and one such qualification is available from McGill University. Several teachers and administrators are studying for graduate degrees (or have graduated in the first instance) at McGill, UQAM, and Montréal in the area of giftedness but within programs in educational psychology, special education, psychology, and educational administration. There is no present need for graduate programs specifically on giftedness if present flexibility can be maintained, but diploma-level programs at one or two Francophone universities would be highly desireable. During the short term period of implementation, some extra priority for full-time participation in such studies could rapidly provide an initial "cadre" of basically trained personnel.

One other consideration is the question of recognition of the category of education of the gifted for consideration with regard to surplus and availability status during a period of financial retrenchment. The education of the gifted generally, but not exclusively, has attracted younger, more highly trained teachers who are willing and able to undertake the responsibilities. The absence of a specific category for the education of the gifted has meant that this area of growth in the schools has already risked the loss of highly and expensively trained personel with master's degrees in the area. It is recommended that the category be recognized soon so that the core of the initial cadre of trained personnel may still be in the employ of schools and school boards when a major program initiative is taken.

### 4. Teacher Training and Inservice

The training of teachers specifically in the area of giftedness should be the responsibility of those universities equipped to do so. Part of this preparedness is a research program in giftedness which helps to keep the trainers at the frontier of knowledge about giftedness.

The existing system for the organization of inservice appears capable of adding giftedness to its topics.

It is always easy to invent additional burdens for initial teacher training programs. This report will not advocate a course on the gifted in the initial training of every teacher. It will recommend, however, that all teacher training programs, at a suitable point acquaint teachers-in-training with the existence of gifted students and in the course of student teaching provide at least some individual contact with gifted pupils (pupils in the talent pool). A course or more on the gifted should be available among the options a

student may elect.

This approach to training has a reciprocal advantage. By not forcing all teachers or all teachers-in-training to make a substantial commitment to the education of the gifted, neither may every teacher or prospective teacher of the gifted insist on working directly in programs for the gifted, and there is room for selectivity. Such selectivity with regard to personnel is critical to the success of a program.

There has been lot of research on the characteristics of successful teachers of the gifted, both with regard to characteristics and teaching skills. Acquaintance with these is an essential part of the preparation of program coordinators and administrators.

The National Association for Gifted Children and The Association for the Gifted in the U.S.A. are nearing completion on a joint set of guidelines for the training of educational personnel to work with the gifted. Examination of a draft set of these documents and discussions with members of the authoring committees suggest that the final products will be very useful in planning teacher training and inservice, especially with regard to the content of the various components. A final report is expected during 1983.

### 5. Training and Inservice for Administrators

Several elements are essential to this process. They include familiarity with all the parts of the program model, staff selection, motivation, dealing with parents about the gifted, materials selection, and program evaluation. The principal means of providing this training should be through inservice activities, though some may well elect a formal period of study at the

diploma or graduate level.

An important part of maintaining the commitment of members of this group to the education of the gifted is to enable them to come together to share their experiences and interact with invite guests. Such an informal meeting already occurs every second month among gifted program coordinators from English schools in the Montreal area and has been highly valued by the participants.

It is important to underline than no school program for the gifted can succeed without the support of the principal. Such support is not yet widespread in Quebec. A program of sensitization of and education of principals to the existence of an important and unserved educational need is therefore an urgent priority. Many principals will take an interest following the lead of the MEQ in giving attention to the issue of the gifted, but a definite program to inform principals is still needed, regardless of their attitudes.

### 6. Other Professionals

The continuing education of physicians, nurses, psychologists, psychiatrists, optometrists, social workers and child care workers, among others, should include opportunities to learn about gifted children for at least two reasons. First, the high level of children's abilities in combination with other characteristics such as boredom at school, frustration in trying to resolve ethical and social problems, extensive reading with inadequate light, or burdensome family expectations--to name only a very few--can often bring on the symptoms these people deal with. Second, such professionals often discover abilities which are hidden by more visible problems. They should

be encouraged to share such discoveries with schools and to be alert for them. The attitude of other professionals is very positive in this regard; the challenge is to share appropriate expertise with them.

It seems more appropriate to do this with established practitioners, though professionals in training should be able to elect an optional course on the gifted if their program allows.

### 7. Coooperation with Other Institutions

While certain responsibilities in the overall provision of programs for the gifted should be given a priority assignment, some functions are well served by a broad base of involvement. For example, workshops and courses for parents could be available through CEGEP's, community associations, and libraries. Institutions providing physical and mental health care to children are also able to make contributions. Their participation should be welcomed.

### 8. Parent Education

There are two main components to this, (a) the awareness of what is being done with children of school age and how they can help, and (b) the raising of gifted children at any age.

The first question is the direct reponsibility of the school. Parents should be fully appraised of the school's activities and plans, and in particular be informed how the curriculum and identification models work. Not only will this engender support for the school's efforts, but it will also give the parents skills to cope with their children's educational needs out of school. Discussion of the characteristics of gifted children should be

included.

The more general issue of raising gifted children is not a primary responsibility of the school, though certainly of interest. School boards should be encouraged, however, to offer continuing education courses to parents on such matters. In areas served by universities or other institutions serving the gifted, such courses may also be available in those places. A prototypical parent education course is offered by the McGill Summer School for the Gifted.

Parents of gifted children well served by school programs are extremely important supporters of their schools, and schools having the active support of an informed parent body have an important advantage in their pursuit of excellence.

## Part IV Special Considerations in Implementing Programs for Gifted Pupils

### 1. Sensitization

The growth of interest in and educational services for the gifted depends on the active efforts of dedicated supporters and at least the tolerance of colleagues who legitimately may have other preoccupations in schools. It is very important during the first phase of developing programs to undertake a period of sensitization of administrators, teachers, and parents to the benefits of such programs. This is an essential part of the detailed planning of implementation. Some of the specific objections, myths, and concerns are as follows.

(a) "Programs for the gifted are too expensive." This is elaborated in section 4 below, but briefly, programs for the gifted are highly cost effective. They are unlikely to save money, but can be operated with little or no substantial extra costs in the long term. Some of the desireable extra needs can be off-set by judicious use of compacting of the required curriculum and some acceleration. This will be elaborated further. The important point is that otner administrative accomodations may be needed to realize these benefits, especially with regard to scheduling.

(b) "Programs for the gifted are élitist and undemocratic." Elitism results from providing something exclusive. Programs for the gifted seek to include all students who can benefit from them. Furthermore, the élitism accusation, if generalized, would deny learning disabled children their special schooling since it implies that everyone should be served the same educational soup. The gifted are individuals who e

educational needs are not presently well served. Equality of educational opportunity does not mean the same for all, rather equal opportunity to develop to the fullest. It is useful to point out to those whose objection is philosophical-political, that one can find support from as far apart as Jefferson and Marx for programs for the gifted, on one hand that all people are created equal in the value or esteem in which they are to be held, but this famous statement goes on to a usually omitted portion which notes that an equal contribution cannot be expected from all, and, on the other hand, Marx's famous formula about providing to each person according to needs, and expecting a contribution commensuate with ability to provide. Programs for the gifted extend the principles of individualization to pupils of high potential.

(c) "Programs for the gifted have a bad effect on children." There is no evidence in the published literature to support this contention. Every follow-up study of children having been served reports their pleasure at having been involved. It is important to recall that many of these children were unhappy or problems in regular classes. Even if merely fewer problems remain, progress was achieved. There are a number of stories about children who suffered from being skipped, etc. It is important to respond that these children were almost certainly not in a functioning program for the gifted, that support at home and school for the skipping may have been inadequate, that the process itself may have further isolated the child by its not having been part of a normal activity, and that the skipping may also have been from an excellent teacher who helped recognize the child's advanced needs to a less favorable situation. These problems are much less likely to occur

within a well designed program and support system which is able to follow-up all the children. Most ad hoc skipping has considered the job done with the event; a serious deficiency. The observation of difficulties is correct in many cases, but not resulting from the gifted.

(d) "The level of class performance will be lowered." Children are not in school to keep up class averages. Children are in school to be assisted in the maximum development of their personalities and abilities. Second, the concern is partly false. In the present proposals, perhaps one or two students may be best served on a full-time basis by a program for the gifted. Most of the children would remain a part of the class even if some of their time is spent outside or engaged in individual activities. The argument also has little statistical merit. If a class average is high because of the exceptionally high performance of only one or two children, then that is good evidence that those one or two children need a differentiated program, since in a group of say 25 pupils a single student's score would have been 25 points above the others to affect the class average by 1 point on a scale of 100. Assuming no extreme differences in the highest scoring group on some test, if the 3 highest of 25 scores were removed the net change on the group average would be about 3 points out of 100. Since the talent pool idea draws children with a variety of strengths, not necessarily only the highest scores on class tests, and then only removes most of them for part of their activites, a maximum average decline of one or two percent could be anticipated. Even this decline would likely be completely cancelled by the increased opportunities for attention to the other pupils in the class and the incentive to these pupils to fill any leadership vacuum. New stars are visible when the brightest do not

block our vision and it is possible to predict that programs for the gifted would raise class averages by bettering the learning opportunities for all students, in those few circumstances where such averages are worthy of consideration.

(e) "Gifted children can manage on their own." This challenge confuses "gifted" with successful. Gifted children are at least equally represented among underachievers, dropouts, delinquents, and suicides. They are children first and need the same love and support as all others. The attitude expressed in this challenge is more likely a cause of some of the problems of the gifted than a reason not to intentionally serve their needs. Without appropriate nurturing much giftedness is lost.

(f) "It is better to help the handicapped." There is no doubt that the handicapped deserve the considerable help given by the educational system, but gifted programs are not instead of anything else. Not only are some gifted children also handicapped, but it has been suggested that giftedness itself is a handicap, a burden of unrealistically high expectations, pressure, isolation, and risk of failure for gifted children who do not receive appropriate educational services. With the limitations created by the availability of resources it is imperative to serve the educational needs of every student and every identifiable group of students. Not every educator must be dedicated first to the needs of the handicapped or, for that matter, the gifted. There is a place for both.

(g) "A good teacher can program all levels of ability." The ability and opportunity to do so are separate questions. Furthermore, the ability is partly dependent on appropriate training. If the maxim were ture

then total integration of the handicapped could be instantly achieved, and no-one advocates that. In addition, many support services exist to help regular classroom teachers who have handicapped pupils in their classes. A similar arrangement is sought for the gifted: training, support services, and a reasonable balance of services within the classroom, within the school, and through other institutions. Teachers are not magicians, and the fact that the gifted have not until now been served is not their collective fault, but it is good evidence that without programmatic adjustment the most likely future is visible in the past.

(h) "The classroom is robbed of leadership." There are limited opportunities for leadership to be displayed in most classrooms. In fairness to our opinion of the abilities of children, it is virtually certain that the untapped leadership resources far exceed those which may be lost to other parts of the school. The general points raised under (f) are applicable here, too.

## 2. Challenges to Implementation

Some of these points are recapitulations of those made earlier.

(a) There is a dearth of materials available in French. Particular attention to this is required as a prelude to extensive programming.

(b) There remains considerable general inertia and resistance to providing programs for the gifted. Building a committed base of support is important.

(c) Syndical acceptance is one of the most serious sources of resistance, sometimes on ideological principles (challenged above) and sometimes with regard to uncertainty about the impact on employment

opportunities. The matter should be broached directly. It may be helpful in convincing teacher groups of the importance of programs for the gifted by encouraging trilateral discussions with parents through such groups as the Quebec Council for Gifted Children.

(d) The emphasis in the Réoime pédagogique on integration into the regular classroom was conceived without apparent explicit attention to the needs of the gifted. The principle, in general, may be adhered to, but a successful, high quality program for the gifted necessitates flexibility in interpretation and applicaton. Gifted children need some time with other gifted children for their social well-being, to meet other children who accept their unusualness, who share their interests, and to help avoid the feeling that they are superior to others, not merely different.

### 3. Schedule of Implementation

The flexibility the proposed program mechanisms allows considerable flexibiiity in implementation. Some school districts are already active in promoting these services, some more visibly so than others.

From the point at which policies such as these are put into force, perhaps three types of beginnings, should be recognized: (a) schools which are already acting or are ready to begin immediately, (b) schools in which the program could be implemented within one year following a period of sensitization of colleagues, parents, and commissioners, and (c) schools which would be accorded two years in which to sensitize the community and to acquire a basic level of expertise. At the end of a third year every school should have at least an embryonic program, and the networks of responsible persons should have been established. This would complete the short term.

The medium term should see a refinement and expansion of activities at the end of which programs for the gifted would be as normal to a school as special education is now.

4. Costs

This is always a sensitive area to address. In view of the manner of school financing in Quebec, a proposal will be put forward here which does not cost more than the present system but which also calls for perhaps saving a little less than might be hoped in some quarters.

First, the basic parts of the program should be financed by specific designation of budgets already assigned to schools for general operating expenses. If one assumes that the size of the talent pool in any one school is 15% to 25% of the school population, it should be incumbent on each school to account for that percentage of its budget being spent directly on the gifted program, including teacher time, teacher inservice, materials, etc. In fact, since many Types I and III activities would be suitable for children not in the talent pool, the school would be getting an added benefit for all students; recognition of this benefit is essential to avoid some schools minimizing the size of the talent pool so as to maintain the status quo.

The essense of this suggestion is that the operation of schools is supported roughly on the basis of population. Gifted students are already there and they and their families have the right to expect a fair share of the funds to be devoted to their education. The relationship should be direct. Everyone contributes an extra share to support the higher cost of educating children with problems, and there is no reason to challenge this humanitarian principle. On the other hand, there is no reason to put money

into schools for gifted children and not use any of it to directly serve their educational needs.

The second part of this no-extra-cost proposal involves the benefits accrued from compacting the curriculum and from permitted, levels of acceleration. Compacting frees up teacher time as well as for students. Teacher time so freed must be reinvested in the gifted program in an appropriate and defensible manner such as responsibility for conducting Types I, II and III activities or in designing curricular materials. Money saved by the acceleration of gifted pupils, for example, completing the elementary program in five years, should be recycled into the schools for direct service. At present there is a major disincentive to acceleration, namely that 20-plus students requiring a year less in school costs a teaching position. On the other hand, one should avoid wanton acceleration under this proposal. A reasonable limit is needed, not on acceleration, but on the financial return. It is proposed that while one student in 4 or 5 may be part of the talent pool, actual acceleration of a year or more would only be encountered by a fraction of these if a good program is in operation. Perhaps this fraction is one student in twenty-five, that is, approximately one pupil of every entering grade one class might be expected to gain at least one year through school. Even if the ratio were doubled, it is still not disruptive. A suitable regulation might allow each school to retain the per-student funding for up to five percent of its population, which, having been accelerated through service in a program for gifted children in the school, has required less than the regular amount of time to complete the compulsory studies and meets all other criteria for promotion.

These funds could be used in any number of ways, but it must be for the gifted program. One possibility is for a high school and its feeder

elementary schools to pool these funds and hire a consultant/animator/materials developer to serve the group's programs for the gifted.

Finally, there is a considerable amount of talent among teachers presently on availability or s[illegible]us. If a pool of trained personnel were available, equal to one teacher for each two schools as an animator and itinerant teacher, this would provide a tremendous incentive to high quality programs. The surplus teachers are being paid already; the only negative budgetary effect would be to reduce anticipated savings should the surplus group disappear. There is no real extra cost. Also, it is not proposed that the itinerant and resource-room teachers would necessarily come from the surplus pool; in order to have the best qualified people working with the gifted it is important that it be possible to exchange slots with teachers assigned to positions. A decision to take such a step would appear to be necessary soon, as the nature and existence of the surplus pool is subject to both collective agreements and legislation.

### 5. Evaluation of Programs

Ongoing formative evaluation is an essential part of a good program. Any plan for operating a program should include, from the outset, provision for the recurring evaluation of the various components. A self report should be a principal part of such evaluations at each level every two to four years. Annual reports cover too short a time period and make evaluation a burden rather than an asset.

## Part V Conclusion

This report proposes a Quebec-wide system of educational programs for the gifted based on broad and inclusive principles. Such a program plan is feasible, given the will to put it into effect. It is important to repeat that the gifted are insufficiently served in schools in general, but attention to their needs can result in personal enhancement for the children, professional satisfaction for teachers, and a standard of excellence for schools which, in the model suggested, is shared in many ways with the entire school population.

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